

## WHAT IS CLAIMED IS:

1. A piezoelectric oscillator which comprises a piezoelectric vibrator provided with a piezoelectric element for  
5 excitation at a predetermined frequency, and a signal inverting amplifier for supplying current to the piezoelectric element to excite it, characterized in that:

an output terminal of the signal inverting amplifier having its input and output interconnected via a high resistance is  
10 grounded via a series connection of a capacitance and a parallel tuning circuit; the connection point of the capacitance and the parallel tuning circuit is grounded via a diode clamping circuit and is connected to an input terminal of the signal inverting amplifier via two series-connected capacitances; and the  
15 connection point of the two series-connected capacitances is grounded via the piezoelectric vibrator and a frequency adjusting element.

2. A piezoelectric oscillator which comprises a  
20 piezoelectric vibrator provided with a piezoelectric element for excitation at a predetermined frequency, and a signal inverting amplifier for supplying current to the piezoelectric element to excite it, characterized in that

an output terminal of the signal inverting amplifier is  
25 grounded via a series connection of a capacitance and a parallel tuning circuit; the connection point of the capacitance and the

parallel tuning circuit is connected to an input terminal of the signal inverting amplifier via two series-connected capacitances, and the connection point of the two series-connected capacitances is grounded via the piezoelectric vibrator and a frequency adjusting element.

3. The piezoelectric oscillator of claim 1, characterized in that the diode clamping circuit is formed by a parallel circuit of two diodes connected in opposite polarities.

10

4. The piezoelectric oscillator of claim 1 or 2, characterized in that, as viewed from the connection point of the two series-connected capacitances, one of the two capacitances and the parallel tuning circuit constitute a series resonance circuit.

15

5. The piezoelectric oscillator of any one of claims 1 to 4, characterized in that the piezoelectric vibrator is a crystal vibrator.

20